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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,393	11/25/2003	Gon Kim	K-0563	4280

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EXAMINER	
PATEL, RITA RAMESH	
ART UNIT	**PAPER NUMBER**
1792	
MAIL DATE	**DELIVERY MODE**
11/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/720,393	KIM ET AL.	
	Examiner	Art Unit	
	Rita R. Patel	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-12 and 16-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-12 and 16-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/13/07 has been entered.

Response to Applicant's Arguments / Amendments

This Office Action is responsive to the amendments filed on 8/9/07. Claims 6-12 and 16-24 are pending. Claims 10-12 have been amended. Claims 1-5 and 13-15 are canceled. Applicant's arguments have been considered, but are not persuasive. Thus, claims 6-12 and 16-24 are rejected for the reasons of record.

In response to Applicant's Remarks filed on 8/9/07, Applicant argues that the Ohta reference neither discloses nor suggests that the water level sensor 19 compares a sensed water level to a reference water level, nor that the microprocessor 35 locks or unlocks the cover 2 based on a result of this comparison. However, Ohta does compare a sensed water level (predetermined level) to a reference water level (empty

and/or any level below the predetermined level) and thus reads on Applicant's claims; see pages 5-6 of the Final Office Action filed on 5/16/07.

Double Patenting

In response to Applicant's filing of a Terminal Disclaimer on 8/9/07, the provisional rejection of claims 6-8 under obviousness-type double patenting is hereby withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In claim 10 Applicant recites " maintaining a locked state of the door when the controller determines that power is not applied", however, how is it possible that the controller maintain a locked state if there is no power supplied? It is at once envisaged that when a washing machine is unplugged, the machine's controller can no longer perform any more functions. How can the controller work if it has no power? Does the controller have a separate and distinct power supply?

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, in claim 10 Applicant states "maintaining a locked state of the door when the controller determines that power is not applied", however, it is not clear how a locked state is maintained when there is no power applied, more specifically, how does the controller operate without power? Additionally, for example, after the machine is manufactured then purchased by a user and brought to their home for use, is the door locked and unable to be open until it is plugged in? In another example, if the machine is plugged in, unlocked, and not in use, then if the machine is unplugged at this point does the machine go from an unlocked state to a locked state, although no locked state was previously "maintained"? Clarification is requested.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the Applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the Applicant for patent, except that an international application filed under the treaty defined in section

351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 6-9, 16-20, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohta et al. herein referred to as "Ohta" (US Patent No. 6,626,013).

Ohta teaches a washing machine including a water level sensor 19 (sensing a water level), a cover open/close sensor 20, and a cover lock mechanism 21 (lock/unlocking door). The water level sensor 19 detects the water pressure in the outer tub so as to judge whether water has been reserved to a predetermined level or not. As seen in Figure 7, the washing step controller is chiefly constituted by a first microcomputer 35 (controller) (col. 6, lines 44-45, 47-50, 61-63). The first microcomputer 35 can recognize the operation conditions of the washing machine or the values set by the user, from output values of various sensors in the middle of execution of the washing steps. Such setting can be reflected in the initial screen on the display/operation panel 3 (display portion) (col. 8, lines 33-37, 46-48).

The selection switch 16 of Ohta is selected to the standard panel layout of Figure 13. When the power switch 15 (power) is turned on, the screen shown in Figure 17A is displayed on the liquid crystal panel 3b. When the power is turned on, the first and second microprocessors are reset, and an initialization program is executed. The first microprocessor 35 sends a command {initialize} for initializing panel setting to the second microprocessor 45 as one of the initialization program. In response to this initialization command, the second microprocessor 45 displays the screen of Figure 17A (col. 14, lines 3-14).

It is also taught that when the power supply in Ohta is stopped, the first microprocessor 35 confirms that the washing tub has stopped its rotation and releases the cover lock mechanism 21 (col. 19, lines 20-24). When water has not reached the predetermined level of Ohta, the door is not locked; therefore, if there is no water the door is unlocked, because a state of 'no water' is inherently less than the predetermined level. As taught by Ohta, the predetermined level is at least a level of water found in the tub (col. 19, lines 20-24). It is also noted that the door of Ohta locks after it reaches a predetermined level; thus, when water is below the predetermined level the door is unlocked, and when water is above the predetermined level the door is locked.

Ohta discloses the first microcomputer 35 detects an electric current value flowing in the pump motor through a current sensor 28d (motor sensor) (col. 21, lines 27-29). Ohta teaches comparing a sensed water level (predetermined level) to a reference water level (empty and/or any level below the predetermined level).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta further in view of Cacalli (US Patent No. 5,802,884).

Ohta teaches the claimed invention except fails to stately indicate locking the door when the controller determines that the washing tub is rotating. However, Cavalli teaches a washing machine wherein the rotating speed of an output shaft of the motor used to rotate the washing basket is sensed and inputted to a control CPU as a signal representative of the rotating speed of the washing basket 12. Cavalli teaches that it is important that the locking mechanism of the door 8 does not enable it to be opened when the washing basket 12 is being spun at a high rate (col. 9, lines 40-43 and 50-54). Locking the door of a washing machine is a known safety feature in the art, as taught by Cavalli. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate said locking feature of Cavalli in cooperation with the invention of Ohta to ensure a safe machine, which does not allow opening during rotation. If the door was opened during rotating, articles may be spun outwards, in addition to fluids, which is dangerous and bodily harmful to the operator.

Claims 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta.

Ohta fails to stately indicate the exact location of said 'predetermined level'. However, it is at once envisaged that the level of the reference water is above a bottom of the washing tub and less than or equal to a bottom of the door to prevent water leaking out if the door was opened prematurely. The predetermined level of liquid at which Ohta locks the door is intimated to be of a level that is no greater than the height of the bottom of the door because only upon reaching this maximum level does the door

finally lock. Any liquid levels greater than the bottom of the door would result in liquid leaking out if the door was unlocked and opened. A predetermined level that is above the bottom of the tub, yet less than the bottom of the door would allow the watering process to have commenced, but not reach above the tub where the water can leak therefrom. Having a nominal amount of water within the machine that is between the bottoms of the tub and door would be envisaged to be a common and safe amount of liquid inside allowing the user to open the door without spillage. In the art of domestic appliances it is commonly known to lock the door when liquid therein reaches a level at which it is leakable if the door is opened. It is not desirable to lock door before this point, in case the user wants to open the machine to remove, add, amend articles therein. It is desirable to lock the door after water exceeds said predetermined level to avoid spilling liquid and causing a mess.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

rrp

MICHAEL BARR
SUPERVISORY PATENT EXAMINER